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(54) Title: METHOD OF MAKING HIGH TEMPERATURE RESISTANT MODELS OR TOOLS

TOOL PRODUCTION PROCESSES

Traditional Process: Lengthy, requiring master

Boeing Process: Assembly using different adhesive and hand applied paddies

Present Invention: Streamlined process Using a machine dispensed curable paste which is both adhesive and a machinable coating

Traditional process

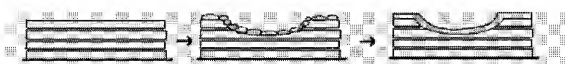


Mold made from boards or SMP in normal manner

Laminate applied with backing structure

Laminated tool produced

Boeing process

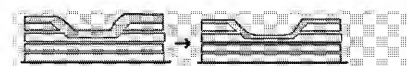


Honeycomb stacked together and cured

Paddies applied by hand and cured

Paddies cut to give final tool

New patent



Honeycomb stacked and stuck together with SMP

Part cured and then cut to give final tool

(57) Abstract: A method of making High Temperature Resistant Models and Tools is provided. An assembly of substrates can be formed with intermediate adhesive layer of curable paste and same curable paste can be used as topcoat or sealer. The curable paste can be machine dispensed from a mixer mixing 2 components composition. The composition can contain a resin, a filler, a chemical thixotropy agent, a latent hardener and another hardener. The method provides easy and cost-effective manufacture of models or tools.



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